# **Software Requirements Specification (SRS) for Pantry2Plate**

## Table of Contents

1. Introduction

1.1 Purpose

1.2 Scope

1.3 Definitions, Acronyms, and Abbreviations

1.4 References

1.5 Overview

2. System Overview

2.1 System Description

2.2 System Architecture

2.3 System Features

2.4 Assumptions and Dependencies

3. Functional Requirements

3.1 User Registration and Authentication

3.1.1 User Registration

3.1.2 User Login

3.1.3 Password Reset

3.2 Pantry Management

3.2.1 Add Items to Pantry

3.2.2 Remove Items from Pantry

3.2.3 View Pantry Inventory

3.2.4 Set Item Expiry Dates

3.3 Recipe Management

3.3.1 Search for Recipes

3.3.2 View Recipe Details

3.3.3 Save Recipes to Favorites

3.3.4 Create a Shopping List from a Recipe

3.4 Meal Planning

3.4.1 Create a Meal Plan

3.4.2 Edit Meal Plan

3.4.3 View Weekly or Monthly Meal Plans

3.4.4 Generate a Grocery List from a Meal Plan

3.5 Grocery List

3.5.1 Create a New Grocery List

3.5.2 Add Items to Grocery List

3.5.3 Remove Items from Grocery List

3.5.4 Mark Items as Purchased

3.6 Notifications

3.6.1 Receive Expiry Date Alerts

3.6.2 Receive Meal Planning Reminder

3.7 User Profile

3.7.1 Edit User Profile

3.7.2 Change Password

3.7.3 Delete Account

4. Non-Functional Requirements

4.1 Performance

4.1.1 The system should respond to user interactions within 2 seconds.

4.1.2 The system should support a minimum of 1000 concurrent users.

4.2 Security

4.2.1 User data should be securely stored and encrypted.

4.2.2 User authentication should follow best security practices.

4.3 Usability

4.3.1 The user interface should be intuitive and user-friendly.

4.3.2 The system should be accessible to users with disabilities.

4.4 Reliability

4.4.1 The system should have a 99.9% uptime.

5. System Constraints

5.1 Hardware Constraints

5.2 Software Constraints

5.3 Regulatory Constraints

6. Appendices

6.1 Glossary

6.2 Use Case Diagrams

6.3 Data Dictionary

7. Change Log

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to outline the functional requirements for the Pantry2Plate system, a pantry and meal planning application.

### 1.2 Scope

This SRS document covers the functional requirements of the Pantry2Plate application, detailing user interactions and system behavior.

### 1.3 Definitions, Acronyms, and Abbreviations

- SRS: Software Requirements Specification

### 1.4 References

- [List any relevant documents or standards]

### 1.5 Overview

[Provide a brief overview of the Pantry2Plate project, its objectives, and expected outcomes.]

## 2. System Overvie

### 2.1 System Description

[Provide a brief description of the Pantry2Plate system.]

### 2.2 System Architecture

[Explain the high-level architecture of the system.]

### 2.3 System Features

[List the key features and functionalities of the Pantry2Plate system.]

### 2.4 Assumptions and Dependencies

[List any assumptions made during the requirements gathering process and system dependencies.]

## 3. Functional Requirements

### 3.1 User Registration and Authentication

#### 3.1.1 User Registration

- Users can register with a unique username and password.

- Users must provide an email address for account verification.

#### 3.1.2 User Login

- Registered users can log in using their credentials.

- User sessions should be maintained.

#### 3.1.3 Password Reset

- Users can request a password reset via email.

### 3.2 Pantry Management

#### 3.2.1 Add Items to Pantry

- Users can add items to their pantry, specifying the item name, quantity, and category.

- Items should be searchable and sortable.

#### 3.2.2 Remove Items from Pantry

- Users can remove items from their pantry.

#### 3.2.3 View Pantry Inventory

- Users can view their entire pantry inventory.

#### 3.2.4 Set Item Expiry Dates

- Users can set expiry dates for items in the pantry.

[Continue to list and describe functional requirements for each module.]

## 4. Non-Functional Requirements

[Document performance, security, usability, and reliability requirements as discussed earlier.]

## 5. System Constraints

[Detail hardware, software, and regulatory constraints, if applicable.]

## 6. Appendices

[Include a glossary, use case diagrams, data dictionary, and any other relevant materials.]

## 7. Change Log

[Track changes made to the document, including version history and revision dates.]